

3S/N 10/758,296

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	SHELLY WALTER ET AL.	Examiner:	T. TRAN LIEN
Serial No.:	10/758,296	Group Art Unit:	1761
Filed:	JANUARY 15, 2004	Docket No.:	2661.688USI2
Title:	PIZZA AND CRUST HAVING AN IRREGULAR SHAPE		

---

**ELECTRONICALLY FILED ON SEPTEMBER 23, 2008**

**APPELLANTS' AMENDED BRIEF ON APPEAL**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**23552**  
PATENT TRADEMARK OFFICE

Dear Examiner:

This Brief is presented in support of the Notice of Appeal filed June 18, 2008, from the final rejection of claims 1-3, 5-21, 45-47 and 52 as set forth in the Advisory Action mailed on May 30, 2008. The Notice of Appeal was filed in accordance with 37 C.F.R. §§ 41.31(a) and 41.20(b)(1). Appellants received a Notification of Non-Compliant Appeal Brief mailed August 27, 2008. Appellants believe that the amendments to this Amended Brief on Appeal comply with the required corrections contained in said Notification in accordance with MPEP 1205.03.

**The Real Party of Interest** is set forth on page 3 of this paper.

**Related Appeals and Interferences** are set forth on page 4 of this paper.

**The Status of Claims** is set forth on page 5 of this paper.

**The Status of Amendments** is set forth on page 6 of this paper.

**A Summary of Claimed Subject Matter** is set forth beginning on page 7 of this paper.

The **Grounds of Rejection to be Reviewed on Appeal** are set forth on page 9 of this paper.

The **Arguments** with respect to the grounds of rejection to be reviewed on Appeal begin on page 10 of this paper.

A **Claims Appendix** beginning at page 35 of this paper includes a copy of the claims involved in the Appeal.

An **Evidence Appendix** beginning at page 39 of this paper includes copies of all evidence entered and relied upon in the Appeal.

A **Related Proceeding Appendix** beginning at page 42 of this paper includes any copies of decisions rendered by a court or the Board and any proceeding identified in the related Appeals and Interferences section.

### **I. REAL PARTY OF INTEREST**

According to 37 C.F.R. § 41.37(c)(1)(i), a statement identifying by name the real party in interest is required. The following statement is in accordance with the Rule.

As Assignment recorded on July 12, 2006 at Reel 017914, Frame 0876, lists Schwan's Global Supply Chain, Inc. as the assignee of the present application. Schwan's Global Supply Chain, Inc. is the real party of interest for this appeal.

## **II. RELATED APPEALS AND INTERFERENCES**

According to 37 C.F.R. § 41.37(c)(1)(ii), a statement identifying by application, patent, appeal or interference number all other prior and pending appeals, interferences or judicial proceedings known to appellants, the appellants' legal representative, or assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal is required. The following statement is in accordance with the Rule.

There are no related appeals or interferences.

### **III. STATUS OF CLAIMS**

Under 37 C.F.R. § 41.37(c)(1)(iii), a statement of the status of all claims in the proceeding (e.g., rejected, allowed or confirmed, withdrawn, objected to, canceled) and an identification of those claims that are being appealed is required. The following statements are in accordance with the rule.

No claims are allowed. No claims are objected to. No claims have been withdrawn from consideration. Claims 4, 22-44, 48-51 and 53-54 have been cancelled. Claims 1-3, 5-21, 45-47 and 52 have been rejected. Claims 1-3, 5-21, 45-57 and 52 are appealed.

#### **IV. STATUS OF AMENDMENTS**

Under 37 C.F.R. § 41.37(c)(1)(iii), a statement of the status of any amendment filed subsequent to final rejection is required. The following statement is in accordance with the Rule.

No amendments were filed following the Final Rejection mailed on March 13, 2008.

## **V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

Under 37 C.F.R. § 41.37(c)(1)(v), a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number, and to the drawing, if any, by reference characters is required. The following statements are in accordance with the Rule. Dependent claims, where argued separately, are also explained.

The invention is directed to a parbaked pizza crust for a premium, high quality frozen pizza. The invention solves the problem of not being able make a premium frozen pizza with an irregular crust that mimics a hand-made crust with automatic production equipment. The claimed aspect allowing for this is a crust with an irregular edge having at least a two fold symmetry that also comprises a registration means engaging edge. Such a symmetry obtains two sides of the crust that are irregular but are identical.

The pending claims include two independent claims summarized below.

### **Claim 1:**

Independent claim 1 is directed to a parbaked crust for a premium pizza. (Instant Application, Abstract). The crust comprises a flour based dough formula. (Instant Application, para. 31). The flour based dough formula comprises 65 to 75 wt% moisture, 0.5 to 2 wt% sugar sweetener, and less than 2 wt% oil. (Instant Application, para. 7, 8, 10, 30, 31, and 34 and claims 1 and 11 as originally filed). The parbaked crust is capable of expansion upon baking at 350°F to 450°F. (Instant Application, para. 7, 8, 9, 30, 38, 56, 57, and 60). The parbaked crust edge comprises a registration means engaging edge. (Instant Application, FIGS. 1A and 1B and para. 12, 35, and 55). The parbaked crust edge has a square or rectangular aspect with at least a

two fold symmetry in the irregular edges as the crust is rotated around a central part. (Instant Application, FIGS. 1A and 1B and para. 7, 9, 11-13, 21-25, 31, 35, 40, 45, 55, 56, and 61).

Further, the parbaked crust edge has an irregular profile as a result of its manufacture. (Instant Application, FIGS. 1A and 1B and para. 7, 9, 11, 13, 21, 23, 24, and 45).

Claim 11:

Independent claim 11 is directed to a parbaked crust unit for a premium pizza. (Instant Application, Abstract). The crust comprises a flour based dough formula. (Instant Application, para. 31). The flour based dough formula comprises 65 to 75 wt% moisture, 0.5 to 2 wt% sugar sweetener, and less than 2 wt% oil. (Instant Application, para. 10, 30, and 34 and claims 1 and 11 as originally filed). The parbaked crust comprises a substantially planar crust having a planar surface. (Instant Application, FIGS. 1A and 1B, para. 56, and claims 3, 6, 11, and 13 as originally filed). The substantially planar surface has a coating of sauce and pizza toppings. (Instant Application, para. 9, 26, 27, 35, 37, 54, and 55). The parbaked crust comprises a substantially square aspect having a crust edge. (Instant Application, FIGS. 1A and 1B and para. 21, 22, 25, 35, and 40). The parbaked crust is capable of expansion upon baking at 350°F to 450°F. (Instant Application, para. 7, 8, 9, 30, 38, 56, 57, and 60). The crust edge comprises a registration mean engaging edge. (Instant Application, FIGS. 1A and 1B and para. 12, 35, and 55). The crust edge has a square aspect with a symmetry as the crust is rotated around a central part. (Instant Application, FIGS. 1A and 1B and para. 7, 9, 11-13, 21-25, 31, 35, 40, 45, 55, 56, and 61). The crust edge has an irregular profile as a result of its manufacture. (Instant Application, FIGS. 1A and 1B and para. 7, 9, 11, 13, 21, 23, 24, and 45). Each of the four edges



has an irregular but identical profile. (Instant Application, FIGS. 1A and 1B and para. 7, 9, 11-13, 23, 24, 45, 55, 56, and 61).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Under 37 C.F.R. § 41.37(c)(1)(vi), a concise statement of each ground of rejection presented for review on appeal is required. The following statements are in accordance with the Rule.

The Examiner rejected claims 1-3, 5-9, 11-16, 18-21, 45-47, 52 under 35 U.S.C. § 103(a) as being unpatentable over Alessandro (EPA 0691078) in view of Strangroom, Vagani, McDaniel et al., Ricke et al. and Kordic.

The Examiner rejected claims 10, 17 under 35 U.S.C. § 103(a) as being unpatentable over Alessandro (EPA 0691078) in view of Stangroom, Vagani, McDaniel et al., Kordic and Ricke et al. as applied to claims 1-3, 5-9, 11-16, 18-21, 45-47, 52, and further in view of Pesheck et al.

## **VII. ARGUMENT**

Under 37 C.F.R. § 41.37(c)(1)(vii), the contentions of appellants with respect to each ground of rejection presented for review in 37 C.F.R. § 41.37 (c)(1)(vi) of this section, and the basis therefore, with citations of the statutes, regulations, authorities, and parts of the record relied on is required. The following statements are in accordance with the Rule.

### **CONTENTS OF THIS SECTION**

<b>A. The invention is a unique pizza food with a novel formulation, irregular edge symmetry and a registration indicia .....</b>	<b>13</b>
<b>B. The disclosure of Alessandro, European Patent No. 0691078, shows a formulation but does not does not show the irregular edge symmetry of the invention .....</b>	<b>14</b>
<b>C. The disclosure of Strangroom, U.S. Patent No. 3,975,552, does not show the irregular edge symmetry of the invention .....</b>	<b>15</b>
<b>D. The disclosure of Vagani, U.S. Patent No. 5,441,751, does not show the irregular edge symmetry of the invention .....</b>	<b>16</b>
<b>E. The disclosure of McDaniel et al., U.S. Patent No. 5,968,566, does not show the irregular edge symmetry of the invention .....</b>	<b>16</b>
<b>F. The disclosure of Ricke et al., U.S. Patent No. Des. 376,466, shows a regular circular edge and does not show the irregular edge symmetry of the invention .....</b>	<b>17</b>
<b>G. The disclosure of Kordic, U.S. Patent No. 4,417,150, shows a regular square or circular edge and does not show the claimed symmetry .....</b>	<b>18</b>
<b>H. The disclosure of Pesheck et al., U.S. Patent No. 5,576,036, does not show the irregular edge symmetry of the invention .....</b>	<b>18</b>
<b>I. The basis of rejection .....</b>	<b>19</b>

<b>J. Applicable statements of law.....</b>	<b>19</b>
1. <u>Obviousness</u> .....	19
<b>K. The unique pizza food and the novel formulation, irregular edge symmetry and registration means engaging edge is not shown in Alessandro in view of Strangroom, Vagani, McDaniel et al., Ricke et al., Kordic, and Pesheck et al.....</b>	<b>21</b>
1. <u>The claimed irregular edge with a two or four fold symmetry is not obvious in view of the cited references</u> .....	21
a. The cited references do not disclose, teach or suggest the claimed irregular edge with symmetry in a rectangular or square food .....	22
b. The Ricke reference is round and regular – not rectangular or square and irregular .....	22
c. The unique irregular symmetry of the crust edge is not obvious as a matter of preferences .....	23
d. A skilled artisan does not have a reasonable expectation of arriving at the claimed irregular symmetry .....	24
2. <u>The claimed registration means engaging edge is not obvious in view of the cited references</u> .....	25
a. The cited references do not disclose, teach, or suggest the claimed registration means engaging edge.....	26
b. A skilled artisan does not have a reasonable expectation of arriving at the claimed registration means engaging edge .....	27
c. The registration means engaging edge is not merely a process or method step limitation.....	28

3. <u>The formulation of the unique pizza food is not a simple optimization or routine experimentation of the parameters from the cited references</u> .....	30
a. The combination of the formulation with the irregular symmetry provides a unique quality.....	30
b. Impermissible hindsight is necessary to arrive at a parbaked crust that comprises all of the undisclosed, claimed elements .....	31
<b>L. Summary</b> .....	<b>34</b>

**A. The invention is a unique pizza food with a novel formulation, irregular edge symmetry and a registration indicia**

The claims relate to parbaked crust for a premium pizza. The parbaked crust is comprised of a flour based dough formula comprising 65 to 75 wt % moisture, 0.5 to 2 wt% sugar sweetener, and less than 2 %wt oil that expands upon baking at 350°F to 450°F. The parbaked crust edge comprises a registration means engaging edge and has a square or rectangular aspect with an irregular edge symmetry. The irregular edge is repeated in a two or four fold symmetry as the crust is rotated around a central part. Further, the edge of the parbaked crust has an intentional irregular profile as a result of its manufacture.

Applicants demonstrate for the first time a premium pizza crust that mimics a hand-made crust, which can be made utilizing automatic production equipment. The crust is made from a premium dough formula. The claims disclose a unique formula and process for producing dough that creates premium crust. Surprisingly, the parbaked crust expands when cooked at home. Further, the crust edge is substantially square or rectangular with a deliberately formed, irregular and symmetrical edge mimicking a hand formed crust. The irregular edge may have two fold or four fold symmetry when turned in 90 degree increments from around a center point. This symmetry provides both the appearance of being hand formed and manufacturing simplicity. Further, the irregular edge becomes even more irregular upon cooking for increased hand-made appearance.

The irregular shape of the pizza always includes registration indicia, such as an indentation in the irregular periphery of the dough that can cooperate with registration means to maintain the position of the dough when topped using automated topping equipment. The topping means includes a conveyor having a registration peg against which the registration

indiciu from the dough rests to accurately place the crust in the topping apparatus. The edge comprises a registration means, which fixes the pizza crust in a precise location on a production line conveyor such that the cheese, sauce and toppings are accurately placed on the pizza crust and the toppings. Further, the edge comprising a registration means allows for a uniform dispersion of toppings across the surface of the crust. The edge comprising a registration means allows the toppings to reach as close to the edge as desired in this application, such as within 2 to 10 millimeters of the edge in automatic production line equipment.

In light of the knowledge at the time of the Applicants' filing, it is surprising the applicants discovered that an irregular edge for mimicking a handmade crust could be made utilizing automatic production equipment or utilized with such indicia for precise crust placement for strategically locating and evenly topping a frozen pizza with automatic production equipment to produce a high quality, premium frozen pizza.

**B. The disclosure of Alessandro, European Patent No. 0691078, shows a formulation but does not does not show the irregular edge symmetry of the invention**

Alessandro, European Patent No. 0691078 ("Alessandro"), solves the problem of pizza dough requiring a 24-48 hour maturing time. (Alessandro, Abstract and col. 2, lines 29-34). Alessandro discloses adding a culture broth containing bacteria and yeast to the dough mix during the kneading stage to eliminate the 24-48 hour maturing time to allow for an industrial preparation of pizzas. (Alessandro, Abstract and col. 2, lines 29-34).

Alessandro further discloses the preparation of a parbaked crust. (Alessandro, col. 2, lines 4-23). The crust is formulated with 100 part by weight strong flour, 60-72 parts by weight water, 4-5 parts by weight olive oil, 2.5 parts by weight salt, 2 parts by weight malt, 1.5 parts by weight sugar, and 2.4 parts by weight compressed yeast. (Alessandro, col. 2, lines 45-60).

Alessandro discloses cooking the dough at a temperature of between 300°C to 450°C for a time of between 80 and 150 seconds to form the parbaked crust. (Alessandro, col. 3, lines 38-44)

Alessandro does not disclose a registration means engaging edge or an edge with an irregular profile and irregular edge symmetry as the crust is rotated around a central part. Further, Alessandro does not disclose, as conceded by the Examiner, the claimed oil content, edge dimension, square or rectangular shape, irregular profile, degree of expansion, surface area of the dough, thickness of the dough, or weight of the dough.

**C. The disclosure of Strangroom, U.S. Patent No. 3,975,552, does not show the irregular edge symmetry of the invention**

Strangroom, U.S. Patent No. 3,975,552 (“Strangroom”), solves the problem of being able to cook a frozen pizza in a microwave oven while maintaining a crisp crust throughout cooking. (Strangroom, Abstract). To achieve this result, Strangroom discloses a method of making a pizza dough by utilizing a dough comprising about 75 to about 82 percent by weight flour, about 5 percent by weight shortening, and about 18 to about 25 percent by weight moisture, shaping the dough into the shape of a pizza crust, drying the pizza dough to a moisture content about 3 to 8 percent by weight, topping the dough, and baking the dough in a microwave oven. (col. 3, line 64 to col. 4 line 18). Strangroom also discloses that the shortening is preferred at about 1 to 3 percent by weight based on the total weight of the pizza dough. (col. 5 lines 24-43).

Strangroom does not disclose a registration means engaging edge or an edge with an irregular edge profile symmetry as the crust is rotated around a central part. Further, Strangroom does not disclose utilizing dough that comprises about 5% oil or about 1-3% oil, because utilizing oil instead of shortening conflicts with the strict moisture contents needed by the invention to get a crispy crust during microwave cooking. Additionally, Strangroom does not



disclose, as conceded by the Examiner, the claimed acquiring of a toast mark on the edge when baking, edge dimensions, dough surface area, dough weight, dough thickness, or a two or four fold symmetry.

**D. The disclosure of Vagani, U.S. Patent No. 5,441,751, does not show the irregular edge symmetry of the invention**

Vagani, U.S. Patent No. 5,441,751 (“Vagani”), solves the problem of creating a frozen healthy parbaked partially raised pan pizza dough with the taste and texture of freshly made dough. (Vagani, col. 2 lines 9-23). The parbaked dough is healthier because it utilized fewer preservatives than other parbaked dough mixtures. (Vagani, col. line 55 to col. 2 line 23). This pizza dough achieves its goals by utilizing spring wheat white flour. (Vagani, col. 2 lines 9-23). The basic ingredients of the dough are flour, water, yeast, and oil. (Vagani, col. 2 lines 24-25). Vagani discloses that the dough comprises about 0.80 ounces of refined sunflower oil out of a total 53.8 ounces. (co. 3 lines 60-67). Therefore, the sunflower oil comprises about 1.49 percent of the dough by weight.

Vagani does not disclose a registration means engaging edge or an edge with an irregular edge profile and symmetry as the crust is rotated around a central part. Further, Vagani does not disclose, as conceded by the Examiner, the claimed acquiring of a toast mark on the edge when baking, edge dimensions, dough surface area, dough weight, dough thickness, or two or four fold symmetry.

**E. The disclosure of McDaniel et al., U.S. Patent No. 5,968,566, does not show the irregular edge symmetry of the invention**

McDaniel et al., U.S. Patent No. 5,968,566 (“McDaniel”), solves the problem of forming a yeast risen dough that maintains its characteristics during refrigeration storage. (col. 1 lines

51-65 and 13-19). McDaniel discloses utilizing dough with flour comprising a high protein content, water, at least one polyvalent alcohol fatty acid ester, and active yeast to form a yeast risen dough that maintains its characteristics during refrigeration storage. (col. 2 lines 13-16). The dough may also include other suitable dough ingredients, such as oil, salt, non-fat dry milk, and flavorings. (McDaniel, col. 2 lines 19-22). In example 1, McDaniel discloses utilizing about 1.73% oil. (col. 14 lines 11-29).

McDaniel does not disclose a registration means engaging edge or an edge with an irregular edge profile symmetry as the crust is rotated around a central part. Further, McDaniel does not disclose, as conceded by the Examiner, the claimed acquiring of a toast mark on the edge when baking, edge dimensions, dough surface area, dough weight, dough thickness, or four fold symmetry.

**F. The disclosure of Ricke et al., U.S. Patent No. Des. 376,466, shows a regular circular edge and does not show the irregular edge symmetry of the invention**

Ricke et al., U.S. Patent No. Des. 376,466 ("Ricke"), is a design patent directed to a regular scalloped round pizza crust with a novel scalloped edge design for a round shaped pizza.

Ricke does not disclose a registration means engaging edge or an edge with an irregular profile and at least two fold symmetry as the crust is rotated around a central part. Further, Ricke does not disclose, as conceded by the Examiner, the claimed acquiring of a toast mark on the edge when baking, edge dimensions, dough surface area, dough weight, dough thickness, or four fold symmetry.

**G. The disclosure of Kordic, U.S. Patent No. 4,417,150, shows a regular square or circular edge and does not show the claimed symmetry**

Kordic, U.S. Patent No. 4,417,150 (“Kordic”), solves the problem of interior cut slices of pizza having no crust. (col. 1 line 22 to 65). To solve this problem Kordic designed a pizza mold and a method of utilizing this mold to form a pizza with crust around interior cut pizza slices. The pizza pie mold can be in a round or rectangular shape.

Kordic does not disclose a registration means engaging edge or an irregular edge profile symmetry as the crust is rotated around a central part. Further, Kordic does not disclose, as conceded by the Examiner, the claimed acquiring of a toast mark on the edge when baking, edge dimensions, dough surface area, dough weight, dough thickness, or four fold symmetry.

**H. The disclosure of Pesheck et al., U.S. Patent No. 5,576,036, does not show the irregular edge symmetry of the invention**

Pesheck et al., U.S. Patent No. 5,576,036 (“Pesheck”), solves the problem of cooking a pizza in a microwave oven while maintaining a crispy crust without having to utilize a susceptor. (col. 2 line 9-15 and lines 53-60). Pesheck discloses coating the crust with a crisping agent to form an outer layer to maintain the crispy crust without a susceptor. The crisping agent can include the utilization of breadcrumbs. (Pesheck col. 5 line 5-7).

Pesheck does not disclose a registration means engaging edge or an edge with an irregular edge profile symmetry as the crust is rotated around a central part. Further, Pesheck does not disclose, as conceded by the Examiner, the claimed acquiring of a toast mark on the edge when baking, edge dimensions, dough surface area, dough weight, dough thickness, or four fold symmetry.

## **I. The basis of rejection**

The Examiner argues in the Final Office Action dated March 13, 2008 that it would have been obvious to combine the parbaked crust of Alessandro with the crusts disclosed in Strangroom, Vagani, McDaniel, Ricke, and Kordic and to further optimize these references' disclosures with routine experimentation to reach the parbaked crust claimed by the Applicants. The Examiner appears to rely on the general knowledge of the industry, Kordic and Ricke to obtain the irregular but symmetrical edge. Further, the Examiner argues in the Final Office Action dated March 13, 2008 that it would have been obvious to combine the parbaked crust of Alessandro with the crusts disclosed in Strangroom, Vagani, McDaniel, Ricke, Kordic and Pesheck and to further optimize these references' disclosures with routine experimentation to reach the parbaked crust claimed by the Applicants. These rejections are under 35 U.S.C. § 103(a) and not 35 U.S.C. § 102. Inherency is not an issue.

## **J. Applicable statements of law**

### **1. Obviousness**

To establish a *prima facie* case of obviousness, three basic criteria must be met:

1. There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.
2. There must be a reasonable expectation of success.
3. The prior art references, when combined, must teach or suggest all the claim limitations.

*In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991). The Examiner has the burden to establish a *prima facie* case of obviousness. Additionally, the following tenets of patent law must be adhered to:

- (A) The claimed invention must be considered as a whole;
- (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;
- (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and
- (D) Reasonable expectation of success is the standard with which obviousness is determined.

*Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5 (Fed. Cir. 1986). Further, with regard to principle (C) above, the MPEP states at section 2142:

“Knowledge of applicant’s disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the “differences,” conduct the search and evaluate the “subject matter as a whole” of the invention. The tendency to resort to “hindsight” based upon applicant’s disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.”

Secondly, in the recent Supreme Court decision in *KSR International Co. v. Teleflex Inc.*, \_\_\_ S. Ct. \_\_\_, 2007 WL 1237837 (S.Ct. 2007), the Court held that “the [nonobviousness] analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person

of ordinary skill in the art would employ.” However, to make a prima facie case of obviousness, the Supreme Court recited, “it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed.” Id. Even in the face of KSR, the Examiner is required to show all the elements of the invention.

The above tenets of Patent Law apply to the arguments for patentability set forth below.

**K. The unique pizza food and the novel formulation, irregular edge symmetry and registration means engaging edge is not shown in Alessandro in view of Strangroom, Vagani, McDaniel et al., Ricke et al., Kordic, and Pesheck et al.**

**1. The claimed irregular edge with a two or four fold symmetry is not obvious in view of the cited references**

The symmetry of the irregular crust edge provides an important hand made feature not shown in the art. This feature provides an unexpected value. The symmetrical crust has an irregular edge that is repeated on at least one other pizza side. If the pizza is a square pizza, the irregular edge is repeated identically in the symmetrical fashion around the pizza perimeter with four fold symmetry. If the pizza is rectangular, then the symmetrical edges are repeated on opposite edges with two fold symmetry. This symmetry is particularly important since the irregular edge can be prepared using automatic production equipment, while providing the appearance of a hand prepared pizza crust. Further, the irregular edge of the dough enhances the irregular shape upon cooking. For example, the Instant Application recites:

“FIG. 2 is an end view of a cross-section of both the par baked and final baked crust product. FIG. 2 shows that the parbaked crust having a defined edge and thickness upon being fully cooked becomes thicker, obtains a more significant

bread like aspect with open cell structure, and becomes more irregular, more like the nature of a hand made, oven baked, freshly made pizza crust.”

(Instant Application, para. 56).

The claimed irregular edge with symmetry is not obvious, because none of the cited references disclose, teach, or suggest the irregular edge with at least two fold symmetry. The Ricke reference is round and regular and not rectangular or square and irregular. The claimed irregular edge with symmetry is not obvious as a matter of preference. Further, the claimed irregular edge with symmetry is not obvious because based on the prior art, a skilled artisan does not have a reasonable expectation of arriving at the claimed irregular edge.

**a. The cited references do not disclose, teach or suggest the claimed irregular edge with symmetry in a rectangular or square food**

None of the references cited in the Examiner recite a crust with an irregular edge. None of the references recite a crust with an irregular edge that has at least two fold irregular edge symmetry. Therefore, none of the references disclose, teach, or suggest a crust with an irregular edge as claimed in the Instant Application.

**b. The Ricke reference is round and regular – not rectangular or square and irregular**

The Examiner asserts that Kordic discloses the square or rectangular pizza shape and that Ricke et al. discloses the irregular edge in the Final Office Action on pages 3 and 4.

The Ricke Patent is the single reference the Examiner cites to with respect to having an edge other than a straight or round edge. The Ricke Patent is a design patent illustrating a circular pizza crust with a substantially regular scalloped edge. (Ricke, Fig. 1). A scalloped edge repeats the same regular scallop shape around the circular edge of the pizza. A scallop shape repeated along a circular edge as taught in the Ricke Patent does not teach or suggest

either (1) an irregular edge in any case, or (2) a square or rectangular edge with two or four side symmetry as claimed in the Instant Application. Kordic appear to teach a regular square or rectangular crust with no irregular edge. Therefore, the claimed irregular edge with symmetry is not obvious, because none of the references teach or suggest the claimed irregular edge with symmetry.

**c. The unique irregular symmetry of the crust edge is not obvious as a matter of preferences**

With regard to the symmetry, on page 4 of the Final Office Action, the Examiner asserts:

"It is a matter of preference that is within the skill of one in the art. It would have been obvious to form the pizza in square or rectangular shape because such shape is well known for pizza as exemplified in the Kordic disclosure. Changing or forming in any particular shape would have been an obvious matter of preference. When the crust has a square shape, it is obvious that the crust will have a four fold symmetry."

In this portion of the response, the Examiner entirely misses the point of the invention. The claims recite that the edge has an irregular profile and it is this edge with its irregular profile that is symmetrical around the crust. For instance, the Instant Application recites:

The square pizza, optionally, has a four-way symmetry such that the edge profile of any selected edge is identical to the edge profile of any adjacent edge. The pizza can be rotated through a 90° rotation and at each 90° position, the edge profile is substantially identical or overlapping. Such an edge aspect is both pleasing to consumers and provides ease and convenient manufacture. The pizza can be precut or uncut during manufacture.



(Instant Application, para. 24, Emphasis added). Of course, a square is symmetrical, that is not the point. The point is that Applicants have imposed an irregular edge into the crust perimeter, each edge is identical and that irregular edge obtains a unique symmetry (see Fig 1A).

Furthermore, the issuance of a design patent on a crust shape for a pizza contradicts the Examiner's statement on page 3 of the Final Office Action that "Changing or forming in any particular shape would have been an obvious matter or preference." If any pizza shape is obvious, a design patent on the scalloped edge in the Ricke patent could not have issued. Therefore, the irregular edge with at least two fold symmetry is not obvious, because any designed pizza crust shape cannot be obvious as a matter of preference

**d. A skilled artisan does not have a reasonable expectation of arriving at the claimed  
irregular symmetry**

The irregular edge symmetry is utilized to provide the appearance of a hand made crust. The hand made crust provides the appearance of a higher quality pizza. However, the irregular shaped crust edge makes automatic cutting and topping of the dough difficult. To precisely cut and precisely and uniformly cover a pizza crust with an irregular edge, the edge was designed to have a two fold or four fold symmetry.

The prior art discloses a regular edge in a round, rectangular, square, and round scalloped edge pizza crust. There is no discussion that would lead to an deliberate irregular edge. None of these pizza crust edges negatively effect automatic processing. None of the pizza crust edges suggest the utilization of an irregular edge. None of the pizza crust edges increase the difficulty in utilizing uniform and precise automatic topping or cutting equipment. Therefore, a person of skill in the art would not be motivated by a round pizza with a uniform repeating scallop edge to design an irregular edge. Therefore, a person of skill in the art would not be motivated by a

round pizza with a repeating scallop edge to design an irregular edge with at least two fold symmetry to provide for more precise automatic cutting equipment and a more uniform and precise automatic topping equipment while improving the quality appearance of the dough. The irregular edge with at least two fold symmetry is not obvious because a person of skill in the art would not have a reasonable expectation of arriving at the claimed irregular symmetry.

**2. The claimed registration means engaging edge is not obvious in view of the cited references**

The registration means engaging edge is a feature of the crust edge that cooperates with the conveyor mechanism and locates the crust on a conveyor belt accurately. The accuracy of the location obtains extremely accurate placement of sauce, cheese, meats and other pizza condiments to the crust. This registration means engaging edge is an important aspect of the invention since it substantially improves product quality and enhances production efficiency and economy.

With regards to the registration means engaging edge, the specification of the Instant Application recites:

“The irregular aspect and optional four fold symmetry, which is identical from crust to crust, provides a unique ability to place accurately the crust and register the crust in a specific location such that the sauce, cheese and other toppings can be carefully applied in exactly the right location. For the purpose of this disclosure, the term “registration” indicates that the crust is aligned carefully with the application apparatus such that the sauce, cheese and other toppings are placed exactly in the correct location on the crust in a repeatably precise location from crust to crust during production. Such accurate registration is obtained by placing

the crust having registration indicia in the crust edge on a conveyor surface in contact with a registration means on the conveyor that holds the crust in place using the irregular edges.”

(Instant Application, para. 12).

The claimed registration means engaging edge is not obvious because the cited references do not disclose, teach, or suggest the claimed registration means in an engaging edge. The claimed registration means engaging edge is not obvious because a skilled artisan does not have a reasonable expectation of arriving at the claimed registration means engaging edge. Further, the claimed registration means engaging edge is not obvious because the registration means engaging edge is not merely a process or method step limitation.

**a. The cited references do not disclose, teach, or suggest the claimed registration means engaging edge**

None of the references cited by the Examiner recite a crust with a registration means engaging edge. None of the references recite a crust with a registration indicia for engaging a registration means in a conveyor or other production equipment. None of the references disclose a registration means engaging edge for allowing the use of automated topping equipment with an irregular edge shape. Therefore, the registration means engaging edge is not obvious because none of the references disclose, teach, or suggest a crust with a registration means engaging edge as claimed in the Instant Application.

**b. A skilled artisan does not have a reasonable expectation of arriving at the claimed registration means engaging edge**

The Examiner asserts that the registration means engaging edge located in the irregular edge of the crust is obvious. For instance, the Examiner recites:

"In the response filed 12/6/07, Applicant argues the crust symmetry and registration means are entirely functional and provide efficient filling and reduced waste in pizza production. This argument is not persuasive; it is not clear what applicant deems as the functional aspect of the square or rectangular shape. In any event, rectangular and square shapes are notoriously known for making pizza as exemplified in the Kordic reference. One would only need to look in a pizza store to see a square or rectangular shape pizza. Thus, whatever function is attributed to the shape, it is obvious the prior art pizza product will have such function."

(Office Action, p. 5).

Again the Examiner misses the point of the claims. The claims recite an irregular edge on a pizza and it is the symmetry of the irregular edge that is the substantial aspect of the invention. As shown earlier, the prior art does not teach or suggest symmetry of an irregular edge. The nature of the edge can be seen clearly. For example, Fig. 1A illustrates that the irregular edges 101, 102, 103 and 104 are identical and provide the required symmetry.

As also shown earlier, the references disclose a round, rectangular, or square pizza and a scalloped edge. None of the references disclose an edge with a registration means let alone any functionality. Therefore, a skilled artisan does not have a reasonable expectation of arriving at the claimed registration means engaging edge for allowing the automatic topping of an irregular

edge by relying on references disclosing a nonfunctional round, rectangular, or square pizza with a nonfunctional scalloped edge. Therefore, the claimed registration means engaging edge for allowing the automatic topping of an irregular edge is not obvious because a person skilled in the art would not have a reasonable expectation of successfully arriving at the claimed registration means.

**c. The registration means engaging edge is not merely a process or method step limitation**

The Examiner goes on to assert as follows:

"As to the registration means to help position the crust on the conveyor. This is a function during processing and not a function in the final baked product.

Furthermore, the registrations means is an indentation in the edge due to the shape of the edge and the prior art to Ricke et al teach such irregular shape."

(Final Office Action, p. 5.) The Examiner's comments are not clear with respect to this rejection. The Examiner appears to be arguing that the registration means engaging edge is a process limitation and not a structural limitation. However, the Examiner acknowledges that the registration means engaging edge is a physical portion of the crust by stating that the registration means engaging edge is an indentation in the shape of the crust's edge. If this is the Examiner's argument, this assertion is misguided. The registration means engaging edge is physically a portion of the crust both before and after baking, as conceded by the Examiner. For instance the Instant Application recites:

"The irregular shape of the square pizza always includes registration indicia, commonly, an indentation in the irregular periphery of the dough that can cooperate with registration means to maintain the position of the dough when

topped using automated topping equipment. The topping means includes a conveyor having a registration peg against which the registration indicium from the dough rests to accurately place the crust in the topping apparatus.”

(Instant Application, para. 35). Thus, the registration means engaging edge is a structural element and is not merely a process limitation.

Further, the registration means engaging edge as claimed in the Instant Application proves that the irregular edge shape of the crust is not merely an obvious ascetic element. The registration means engaging edge provides a unique and beneficial function to the crust of the claimed invention. For instance, the Application recites:

“The generally irregular shape can have registration indicia formed in the irregular crust. These indicia can comprise a recessed portion of the periphery that can match registration means, in this figure [(1A)] pins 105, fixing the pizza crust in a precise location such that the cheese, sauce and toppings are accurately placed on the pizza crust and the toppings are uniform across the surface and reach as close to the edge as desired in this application commonly within 2 to 10 millimeters of the edge.”

(Instant Application, para. 55). Neither Ricke nor Kordic teach or suggest any specific function, let alone a processing alignment function in relation to their crust edge shapes.

The Examiner implies that functionality of a claimed element has to be utilized at a certain time to be patentable by reciting: “As to the registration means to help position the crust on the conveyor. This is a function during processing and not a function in the final baked product.” (Final Office Action, p. 5). This is not consistent. The timing of when a structural element is utilized is irrelevant to the structural limitation as an aspect in a claimed invention.

Almost any structural element has an intended function and often times a structural element provides a function during processing. No law or rule excludes structural elements from patentability if they perform a function during processing. Therefore, the registration means engaging edge must be considered an enforceable element of the claims of the Instant Application.

The registration means engaging edge cannot merely be a processing step, since the registration means engaging edge is a physical object located in the irregular edge of the crust. Therefore, the registration means engaging edge of the Instant Application must be considered as a limiting element of the claims of the Instant Application. Thus, the claims can not be obvious because the registration means engaging edge is a claimed limitation not taught or disclosed in the prior art.

**3. The formulation of the unique pizza food is not a simple optimization or routine experimentation of the parameters from the cited references**

The formulation of the unique pizza food is not a simple optimization or routine experimentation of the parameters from the cited references because the combination of the formulation with the irregular symmetry provides a unique quality and because impermissible hindsight is necessary to arrive at a combination that comprises all of the undisclosed, claimed elements.

**a. The combination of the formulation with the irregular symmetry provides a unique quality**

The invention combines a number of product aspects that in combination provide a quality frozen pizza that can be machine made but provides hand made quality. These aspects cooperate and result in a quality crust, accurate application of toppings and a hand thrown

appearance. The products of the invention do not have an ordinary appearance in crust quality or shape as seen in conventional products. The product has the appearance of a freshly prepared hand made pizza.

The dough formulation provide for a high quality crust. The irregular edge provides the appearance a hand made pizza. The symmetry of the irregular crust allows for the crust to be cut with automatic equipment and for the toppings to be applied to the crust with an irregular edge by automatic equipment. The registration means engaging edge provides for accurate and uniform topping placement by the automatic means. As previously discussed, the irregular shaped crust comprises registration indicia that can match registration pins for fixing the position of irregular shaped pizza crust to allow uniform and/or precise application of the cheese, sauce and other pizza condiments. The registration means engaging edge allows the toppings to reach within 2 millimeters of the irregular edge. The precise and uniform application of toppings also provides for a high quality pizza that can be made with automatic processing equipment.

Therefore, the unique combination of the dough formulation, the irregular shaped edge, and the registration means engaging edge provide for a unique high quality pizza that has the appearance of a hand made pizza that is suitable for automatic processing.

**b. Impermissible hindsight is necessary to arrive at a parbaked crust that comprises all of the undisclosed, claimed elements**

The Examiner, in the Final Office Action on page 2, discusses the content of the prior art. The Office Action admits that the primary reference does not disclose any of the important aspects of the invention. The Office Action concedes that the Alessandro reference does not disclose the combination of: (1) oil content, (2) dimension of the edge, (3) a square or



rectangular shape, (4) the irregular edge profile, (5) the degree of expansion, (6) the surface area of the dough, (7) the thickness of the dough, or (8) the weight of the dough as claimed.

The Examiner asserts that Vagani, Stangroom, and McDaniel disclose the amount of oil claimed in the Instant Application. The Examiner asserts that Kordic discloses the square or rectangular pizza shape and that Ricke et al. discloses the irregular edge. The Examiner recognizes the failure of the prior art to teach several of the claimed features, such as the acquiring of a toast mark on the edge when baking, the edge dimensions, the dough surface area, the dough weight, the dough thickness, and the four fold symmetry. The Examiner asserts on the bottom of page 2 through page 4 that these claimed features are simply a matter of routine experimentation or optimization from the prior art. The Examiner asserts the amount of oil, the amount of crust expansion, the nature of the edge pattern, the variation of the edge, the thickness of the crust, the surface area of the crust, the weight of the dough, and the other claimed aspects, such as the registration means engaging edge, are all a matter of routine experimentation and optimization.

A modification of one or two of these aspects may be expected, however, the selection and engineering of all these numerous aspects in combination cannot be obvious. The selection of these aspects without hind sight is impossible. Each aspect requires its own testing and experimentation for selection and each aspect will have to be tested to guarantee that it does not interfere with another claimed aspect of the invention. Some of the aspects, such as the irregular edge, the at least twofold symmetry of the irregular edge, and the registration means engaging edge have to be conceived of and selected along with engineering. The references do not teach or suggest that any of these parameters can be easily set independently or in combination. If each of these parameters needs to be conceived of, engineered and/or optimized, then it is clear

that undue experimentation is necessary to reach the claimed result. Further, there is no reason why a person of skill in the art would chose to combine the elements as claimed in the Instant Application. The only reason for combining these elements is to obtain the claims of the Instant Application. Therefore, the combination of these elements as claimed in the Instant Application relies on impermissible hindsight.


At an absolute minimum, the Examiner has not explained why one of ordinary skill in the art would be able to conceive of and perform all of the claimed elements together without undue experimentation and impermissible hindsight. When so many things become a matter of design choice, it is simply impossible to argue that the selection of each one is obvious in the context of at least four other different aspects of crust design.

## L. SUMMARY

In view of the above comments, the claimed invention would not have been obvious from the combination of Alessandro, Strangroom, Vagani, McDaniel et al., Ricke et al., Kordic, and Pesheck et al. Accordingly, withdrawal of the prior art-based rejection is requested. Applicants respectfully request that the Examiner's rejection of claims 1-3, 5-21, 45-47 and 52 be reversed, and that all of the pending claims be allowed.

Respectfully submitted,  
MERCHANT & GOULD P.C.  
222 S. 15<sup>th</sup> Street  
Omaha, NE 68102-1652  
402.344.3000

Date: September 23, 2008



By: Marianne R. Timm  
MRT/sk

Attachment: Appendices

## **VIII. CLAIMS APPENDIX**

Under 37 C.F.R. § 41.37(c)(1)(vi), an appendix containing a copy of the claims involved in the appeal is required. The following listing is in accordance with the Rule.

### **Listing of Claims:**

1. (Previously Presented) A parbaked crust for a premium pizza, the crust comprising a flour based dough formula comprising 65 to 75 wt% moisture, 0.5 to 2 wt% sugar sweetener, and less than 2 wt% oil, the parbaked crust capable of expansion upon baking at 350°F to 450°F; wherein the crust edge comprises a registration means engaging edge and the edge has a square or rectangular aspect with a symmetry as the crust is rotated around a central part and has an irregular profile as a result of its manufacture.

2. (Previously Presented) The crust of claim 1 wherein the parbaked crust can expand in height by at least 10% upon final baking.

3. (Previously Presented) The crust of claim 1 further comprising:

- (a) a substantially planar crust in a substantially square aspect having a crust edge; and
- (b) the crust has four fold a symmetry.

4. (Cancelled)

5. (Original) The crust of claim 1 wherein the crust comprises a rectangular shape.

6. (Original) The crust of claim 1 wherein the crust comprises a single layer of parbaked dough and can expand in height by at least 10% upon final baking, and at least 5% of the surface can depart from the planar nature of the parbaked crust.

7. (Previously Presented) The crust of claim 3 wherein the crust edge comprises an irregular sinusoidal profile.

8. (Original) The crust of claim 1 wherein the crust edge comprises an irregular series of connected line segments.

9. (Original) The crust of claim 1 wherein the crust has a thickness of about 0.2 to about 2 centimeter and comprises about 1.3 to 1.9 wt% oil.

10. (Original) The crust of claim 1 wherein the crust comprises a surface application of bread crumbs in an amount of about 2 to about 40 grams of bread crumbs per each pound of crust.

11. (Previously Presented) A parbaked crust unit for a premium pizza, the crust comprising a flour based dough formula comprising 65 to 75 wt% moisture, 0.5 to 2 wt% sugar sweetener and less than 2 wt% oil, the crust comprising:

- (a) a substantially planar crust having a substantially planar surface, the crust having a substantially square aspect having a crust edge;
- (b) the crust edge having an irregular profile; and
- (c) the substantially planar surface having a coating of sauce and pizza toppings, the parbaked crust capable of expansion upon baking at 350°F to 450°F; wherein the crust edge comprises a registration means engaging edge and the edge has a square aspect with a symmetry as the crust is rotated around a central part and has an irregular profile as a result of its manufacture.

12. (Original) The crust of claim 11 wherein the crust comprises a single layer of parbaked dough and the crust comprises a four-fold symmetry when rotated in the plane of the planar crust.

13. (Original) The crust of claim 11 wherein the crust comprises a single layer of parbaked dough and the crust comprises a rectangular shape.

14. (Previously Presented) The crust of claim 11 wherein the crust edge comprises an irregular sinusoidal profile.

15. (Previously Presented) The crust of claim 11 wherein the crust edge comprises an irregular series of connected line segments.

16. (Original) The crust of claim 11 wherein the crust has a thickness of about 0.2 to about 2 centimeter and comprises about 1.3 to 1.9 wt% oil.

17. (Original) The crust of claim 11 wherein the crust comprises a surface application of bread crumbs in an amount of about 2 to about 40 grams of bread crumbs per each pound of crust.

18. (Original) The crust of claim 11 wherein the crust edge ranges from about 11.25 to about 12.5 inches on a side.

19. (Original) The crust of claim 11 wherein the crust has a surface area of about 110 to 150 in<sup>2</sup>.

20. (Original) The crust of claim 11 wherein the crust has a weight of about 9 to about 12 ounces.

21. (Original) The crust of claim 11 wherein the premium dough comprises about 49 to 52 wt% flour, about 34 to 37 wt% water, about 1 to about 2 wt% sugar sweetener and comprises about 1.3 to 1.9 wt% oil.

22 – 44. (Cancelled)

45. (Original) The crust of claim 1 wherein the crust has a crust edge that ranges from about 11.25 to about 12.5 inches on a side.

46. (Original) The crust of claim 1 wherein the crust has a crust edge that is about 8 inches on a side.

47. (Original) The crust of claim 11 wherein the crust edge is about 8 inches on a side.

48 - 51. (Cancelled)

52. (Previously Presented) The crust of claim 1 wherein the crust has a crust edge having an irregular profile such that the risen, expanded and baked crust obtains toast marks substantially similar to a brick-oven fired conventional hand formed crust.

53 - 54. (Cancelled)

## **IX. EVIDENCE APPENDIX**

### **A. OFFICE ACTIONS AND AMENDMENTS/RESPONSES**

1. Advisory Action -- mailed May 30, 2008
2. Amendment under Rule 116 -- filed May 13, 2008
3. Final Office Action -- mailed March 13, 2008
4. Amendment -- filed December 6, 2007
5. Office Action -- mailed October 11, 2007

### **B. REFERENCES RELIED UPON BY THE EXAMINER**

U.S. Patent No. 6,365,210

U.S. Patent No. 5,968,566

U.S. Patent No. 5,576,036

U.S. Design Patent No. D376,466

U.S. Patent No. 5,441,751

U.S. Patent No. 3,975,552

### **C. REFERENCES CITED BY APPELLANTS**

U.S. Patent No. 3,615,679

U.S. Patent No. 4,062,983

U.S. Patent No. 4,271,200

U.S. Patent No. 4,917,907

U.S. Patent No. 4,978,544



U.S. Patent No. 5,012,726

U.S. Patent No. 5,117,749

U.S. Patent No. 5,287,781

U.S. Patent No. 5,417,150

U.S. Patent No. 5,508,049

U.S. Patent No. 5,538,744

U.S. Patent No. 5,622,742

U.S. Patent No. 5,756,137

U.S. Patent No. 5,789,009

U.S. Patent No. 5,865,107

U.S. Patent No. 5,914,140

U.S. Patent No. 5,980,967

U.S. Patent No. 5,989,603

U.S. Patent No. 6,048,556

U.S. Patent No. 6,156,356

U.S. Patent No. 6,156,364

U.S. Patent No. 6,165,522

U.S. Patent No. 6,291,002

U.S. Patent No. 6,364,653 B1

U.S. Publication No. 2002/0076474 A1

U.S. Publication No. 2002/0090422 A1

U.S. Publication No. 2002/0197360 A1

U.S. Publication No. 2003/0003211 A1

DE 100 12 697 A1

EP 0 691 078 A2

GB 2 284 738 A

PCT WO 03/022059 A2

PCT WO 03/022060 A1

Copy of U.S. Patent Application Serial No. 10/354,896, "Pizza and Crust Having a Square Aspect and an Irregular Edge," filed January 29, 2003

Copy of U.S. Patent Application Serial No. 10/732,173, "Pizza and Crust Having an Irregular Edge," filed December 9, 2003

**D. CASES CITED IN THE BRIEF**

*Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5 (Fed. Cir. 1986).

*In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991)

*KSR International Co. v. Teleflex Inc.*, \_\_\_ S. Ct. \_\_\_, 2007 WL 1237837 (S.Ct. 2007)

## **X. RELATED PROCEEDINGS APPENDIX**

Under 37 C.F.R. § 41.37(c)(1)(x), an appendix containing copies of decisions rendered by a court or the Board in any proceeding identified pursuant to 37 C.F.R. § 41.37(c)(1)(ii) is required. The following listing is relevant in accordance with the Rule.

There are no proceedings to report.